NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

STRIPCROPPING, FIELD

(Acre)

CODE 586

DEFINITION

Growing crops in a systematic arrangement of strips or bands across the general slope (not on the contour) to reduce water erosion. The crops are arranged so that a strip of grass or a close-growing crop is alternated with a clean-tilled crop or fallow.

PURPOSE

To help control erosion and runoff on sloping cropland where contour stripcropping is not practical.

CONDITIONS WHERE PRACTICE APPLIES

On sloping cropland and on certain recreation and wildlife land.

CRITERIA

The widths shall be governed by the percent of slopes as shown on the table below. Strip widths may be adjusted to the nearest multiple of rows according to the size of equipment used.

Strip boundaries shall parallel diversions or be laid out as nearly as possible on the contour. Deviation of grades from the contour shall be sufficient to provide adequate row drainage and for the practical operation of equipment, but not exceed two percent. Water shall not be conducted along graded rows for more than 500 feet. Deviation in grade in the direction of flow are permissible for a maximum of 300 feet at no greater than five percent, unless runoff analysis shows a longer reach will not exceed maximum permissible bare velocities for the particular soil.

Tillage operations and planting crops shall be parallel to strip boundaries.

Maximum Strip Widths and Slope-Length Limits for Field Stripcropping

LAND SLOPE (Percent)	STRIP WIDTH (Feet)	MAXIMUM SLOPE LENGTH (Feet)
1 – 2	150	900
3 – 5	125	750
6 – 8	100	600
9 – 12	75	300
13 – 16	60	240

Benefits of Field Stripcropping are not dependable on sloping land greater than 16 percent. For adjustments to soil loss estimates as calculated through the Revised Universal Soil Loss Equation (RUSLE), see Section I of the Vermont Field Office Technical Guide for P factors to be used in soil loss calculations.

CONSIDERATIONS

Field strip cropping should be considered where contour stripcropping is not feasible and/or necessary to meet soil loss goals.

Permanent strip guidelines should be installed by the farmer to insure long term management of the field.

Consider re-establishment of hedgerows or other areas for wildlife use where removal of obstructions will result in habitat loss.

Consider installation of permanent vegetated field borders around the perimeter of the stripcropping system to provide travel and turning areas and to facility crop harvest.

Consider permanently vegetating headlands, especially where slopes exceed four percent.

When developing strip layout consider haul distance in the overall management of the stripcropped field. If possible, keep access roads off steeper portions of the field.

When planning a field for field stripcropping, consider the need for water control structures to manage concentrated water flow. Existing waterways and draws should be maintained in sod. When constructing waterways and diversions attempt to install them a year prior to installing the stripcropping system to insure well established vegetation.

Before installing drainage systems in conjunction with stripcropping insure the areas being drained are not wetlands.

Water Quantity

1. Effects on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, deep percolation, and ground-water recharge.

2. Variability of practice's effects caused by seasonal weather variations.

3. Potential for a change in plant growth and transpiration because of changes in the volume of soil water.

Water Quality

1. Filtering effects of vegetation on movement of sediment and dissolved and sediment-attached substances.

2. Effects on erosion and the movement of sediment, pathogens, and soluble and sediment-attached substances carried by runoff.

3. Potential for development of saline seeps or other salinity problems resulting from increased infiltration near restrictive layers

4. Effects on the visual quality of downstream water resources.

PLANS AND SPECIFICATIONS

Specify width of strips for different crops, percentage of slopes, and soils.

As a minimum the following criteria shall be documented in the Conservation Plan Folder: The field/tract number, date implemented, width of strip, percent slope, number of acres, and percent grade, crop rotation and row length for strip guidelines.

Soil loss calculations shall be included for before and after practice installation.

In certain field situations minor deviations from the standard may be required to make the layout farmable. In these situations document the reason and justification for deviating from the standard.